



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/221,291	12/23/1998	MARTIN H. GRAHAM	003921.P005	4813

7590

01/23/2003

Edwin H. Taylor
Blakely, Sokoloff, Taylor, & Zafman LLP
12400 Wilshire Boulevard
Seventh Floor
Los Angeles, CA 90025

EXAMINER

BURD, KEVIN MICHAEL

ART UNIT

PAPER NUMBER

2631

DATE MAILED: 01/23/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/221,291

Applicant(s)

GRAHAM

Examiner

Kevin Burd

Art Unit

2631

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Nov 7, 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 and 14-18 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 14-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- *See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 20 6) ☐ Other:

Art Unit: 2631

DETAILED ACTION

1. This office action, in response to the amendment filed 11/13/2002, is a final office action.

Response to Arguments

2. Applicant's arguments filed 11/13/2002 have been fully considered but they are not persuasive.

Applicant states Evenchik does not teach or suggest sending a consecutive second biphasic pulse at a second time instance after a time interval, wherein the first biphasic pulse and the second biphasic pulse are different types, wherein the time interval between the first time instance and the second time instance represent at least a first set of the data bits, the first set of data bits comprising more than one data bit. Figure 7 shows incoming data in biphasic pulse form being transmitted as consecutive pulses which are different. A second biphasic pulse is transmitted after a time interval. The first time instance is at the beginning of time interval T3. This interval is three bits in length. The second time instance occurs at the end of time interval T3. Therefore, the time interval includes the first biphasic pulse. This pulse represents some amount of data. The time interval will vary according to that data, which is altered by adjusting the width of each segment of the pulse (column 6, lines 36-49).

Art Unit: 2631

For these reasons and the reasons stated in the previous office action, the previous rejections of the claims are maintained and stated below.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 8, 14 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Evenchik (US 4,171,467).

Regarding claims 1, 7, 8, 17 and 18, Evenchik discloses a method of transmitting a sequence of consecutive bipolar pluses over a telephone line (column 2, lines 1832 and lines 48-55). A first bipolar pulse is sent followed by a second bipolar pulse of opposite polarity as shown in figure 7. The data content of the pulse pairs is in the width of each segment of the pulse (figure 7 and column 6, lines 36-49).

Regarding claims 2 and 13, figure 7 further discloses two types of bipolar pulses, those with a negative pulse followed by a positive pulse and the reverse.

Regarding claims 3 and 9, Evenchik further discloses each bit pair has a net energy of zero when averaged over the full cycle (column 2, lines 62-63).

Art Unit: 2631

Regarding claims 4 and 14, Evenchik states "for the purpose of this description, however, all voltage waveforms will be considered as square wave signals" (column 6, lines 16-18).

Regarding claim 6, the bipolar pulses are pulse width modulated as stated above.

Regarding claims 10-12, in figure 7, the outgoing data shows different types of bipolar pulses adjacent to one another.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 5, 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Evenchik (US 4,171,467) in view of Griessbach (US 6,091,779).

Regarding claims 5 and 15, Evenchik discloses a method of transmitting a sequence of bipolar pulses over a telephone line as stated above. Evenchik does not disclose coding the pulse by amplitude. Griessbach discloses coding the alternating signal which is in a biphasic mode, using pulse width and amplitude (column 1, lines 47-55). It would have been obvious for one of ordinary skill in the art at the time of the

Art Unit: 2631

invention to encode additional data by changing the amplitude as disclosed by Griessbach in the method of transmitting a sequence of bipolar pluses over a telephone line disclosed by Evenchik to allow more data to be transmitted during each transmission.

Regarding claim 16, the data content of the bipolar pulses is in the width of the pulses as shown in figure 7 (column 6, lines 36-45).

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Art Unit: 2631

Contact Information

Any response to this final action should be mailed to:

Box AF

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 872-9314, (for formal communications; please mark
"EXPEDITED PROCEDURE" or for informal or draft
communications, please label "PROPOSED" or "DRAFT")

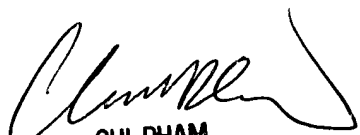
Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,
Arlington, VA., Sixth Floor (Receptionist).

Any inquiry concerning this communication or earlier communications from the
examiner should be directed to Kevin Burd, whose telephone number is (703) 308-
7034. The Examiner can normally be reached on Monday-Thursday from 9:00 AM -
6:00 PM.

Any inquiry of a general nature or relating to the status of this application should
be directed to the Group receptionist whose telephone number is (703) 305-3800.



Kevin M. Burd
PATENT EXAMINER
January 18, 2003



CHI PHAM
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600 1/22/03